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Bud Development

Apple Bud Development as of Tuesday, April 6th was at green tip on McIntosh and early developing cultivars such as Gravenstein and Idared. I did observe Golden Russet trees that were just beyond green tip on the 6th. Apple bud development is at that stage where it was on the 25th of April, 2009. Having contributed and written the Orchard Outlook for over 30 years this is the earliest date for green tip that I have observed. In 1981 the April 10th issue of the Orchard Outlook report apple buds at green tip. So we are off to an early season and hopefully the trend will continue for warm dry weather.

Apple Scab

On March 30th Dr Gordon Braun reported observing mature ascospores. Not in high numbers but at a stage where they would be released during a wetting event. The earliest recorded date prior to this year for mature ascospores was April 4th, 1953. There were wetting periods the later part of last week but no green tissue present thus to date there have been no infection periods. At the time of writing this article a wetting period was ongoing which started between 5:00-6:00 am today. Depending upon the length of the wetting period and average temperature this could be the first infection period of the year. Fungicide applications that take place today or early tomorrow should look after this infection. If you plan to apply copper remember that this is a protectant fungicide and has no back action. With wet weather forecasted for the weekend growers would be well advised to apply a fungicide as soon as possible.

Fire Blight

Given the weather conditions last year there were more fireblight infections than expected. With early tree development I would guess that not all growers were able to prune out cankers. If you are still pruning out cankers; make sure that you do it during dry weather and at least disinfected pruning tools at the end of the day or before moving into a block with out fire blight. The carry over cankers will be the sights were bacterial ooze developes at the bloom period. The

ozze will be transferred from these cankers by insects to the blossoms and further transferred to additional blossoms by pollinating bees. Controlling the blossom blight stage of fire blight will make it so much easier to control shoot infections. Fire blight and its control can involve the application of a copper spray during the dormant bud stage or at the green tip stage. Copper sprays for fire blight control should be applied prior to tight cluster to reduce the risk of fruit russetting. Copper can be applied as a bordeaux spray, 1 kg of Basicop Fungicide or Copper 53W which are 53% copper sulphate per 1000 L of water plus 6 kg of hydrated lime. When making a bordeaux mixture add the copper sulphate to the spray tank and agitate to dissolve. Premix the hydrated lime in a pale of water and pour this mixture through a .3 mm mesh screen and allow 15 minutes of mixing before spraying (read the product label for additional information on mixing). The other option is to use a fixed copper product such as UAP's Copper Spray Fungicide at a rate of 4 kg per hectare at green tip. Apply a sufficient volume of water (minimum 1000L/ha) so that all the wood on the tree is covered with copper. Applying a dormant oil spray with the copper spray will improve the coverage and effectiveness of this product. A copper spray at bud break to tight cluster would also serve as a scab control spray.

Pear Psylla

If you have not already done so, apply oil to control pear psylla. Psylla are now laying eggs and will continue to do so on into May. The oil will discourage egg laying. Apply Superior Oil 70 sec at a rate of 65 L/ha. Good coverage is necessary for control and therefore the oil should be applied with a minimum of 1,000 L of water per hectare.

Orchard Management Guide

This guide was revised and printed for the 2009/2010 growing season. The guide will not be published again until 2011. I have however updated the guide for 2010 and the updated version can be found at the following site <http://www.extensioncentral.com/eng/>.

Updated Fact Sheets

I have updated the following two fact sheets; Thinner and Growth Regulators for Fruit Trees and Guide to Weed Management in Orchards. This should be available at the above web site now or very soon.

Modified Mills Table for determine scab infection periods and appearance of scab lesions

Average Temperature		Wetting Period (hours)			Appearance of Lesions (days)
(°F)	(°C)	Light Infection	Moderate Infection	Heavy Infection	
33-36	0.5-2.2	48	72	96	---
37	2.7	41	55	68	---
38	3.3	37	50	64	---
39	3.9	33	45	60	---
40	4.4	29	41	56	---
41	5.0	26	37	53	---

42	5.5	23	33	50	---
43	6.1	21	30	47	---
44	6.6	19	28	43	---
45	7.2	17	26	40	---
46	7.8	16	24	37	---
47	8.3	15	23	35	---
48	8.9	15	20	30	17
49	9.4	14.5	20	30	17
50	10.0	14	19	29	16
51	10.6	13	18	27	16
52	11.1	12	18	26	15
53	11.7	12	17	25	15
54	12.2	11.5	16	24	14
55	12.8	11	16	24	14
56	13.3	11	15	22	13
57	13.9	10	14	22	13
58	14.4	10	14	21	12
59	15.0	10	13	21	12

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